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# OPERATION NOBLE E

## MEDICAL THREAT BRIEFING

**Presenter's Name**  
**Presenter's Command**  
**Local Contact Information**



**Prepared by:**  
**U.S. Army Center for Health Promotion and Preventive**  
**Medicine**

**(800) 222-9698/ DSN 584-4375/(410) 436-4375**

**<http://usachppm.apgea.army.mil>**

# AGENDA

- **Purpose**
- **Background**
- **Review of *Guide to Staying Healthy***
- **Preparation for Deployment**
- **Deployment**
- **Medical Threat**
- **Post Deployment**
- **Summary**
- **Conclusion**



# PURPOSE

Inform Personnel (Military and Civilian) Deploying in Response to Terrorist Activities or Disasters of the Potential Health Hazards and the Individual Countermeasures Necessary to Assure Personal Safety and Health





# BACKGROUND

- Additional terrorist attacks are likely to occur **UNITED STATES** | States
- US Forces are mobilizing
- Environmental, safety, and occupational health hazards are a potential medical threat to deployed personnel

# GUIDE TO STAYING HEALTHY

## GTA 08-05-062

- Unfold YOUR *Guide to Staying Healthy*, Graphic Training Aid - GTA 08-05-062
- Personal Protective Measures (PPM) – Individual Countermeasures

- **Reference Guide for this Briefing**  
**This guide is for use by all active/reserve component military, civilian, retiree, and contractor personnel. Any individual who trains and prepares for, or participates in any type of military operation should keep and refer to this guide. 8**

# PREPARING TO DEPLOY

- Medical, Dental & Vision Screening (Soldier Readiness Processing)
- Prepare clothing and gear
- Complete Pre-deployment Health Assessment DD Form 2795
- *Prepare for the worst, commercial retail may not be open or available in the United States upon escalation of terrorist activities*



**During medical screening, discuss prescribed medications with the examiner; obtain at least 90-day supply of medications**

# **PREPARING TO DEPLOY FEMALE CONSIDERATIONS**

- Birth control pills
- Feminine Hygiene Products (non-deodorant tampons, sanitary napkins, panty liners; menstrual cramp reliever)
- Yeast infection medication (two courses of vaginal treatment)

**If using birth control pills, continue as prescribed to regulate menstrual cycles and avoid problems resulting from inconsistent use**



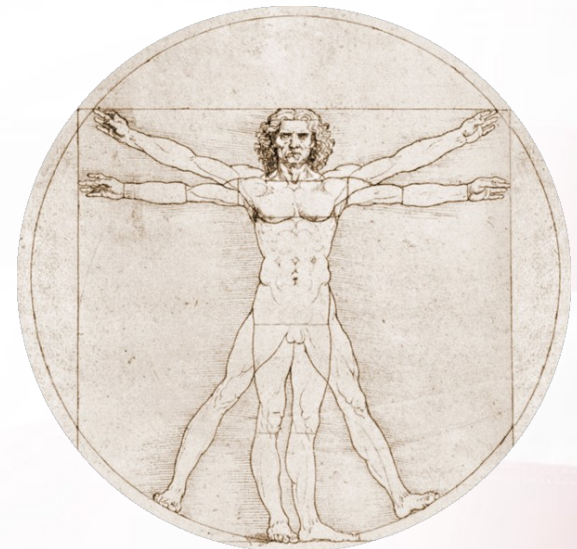
# DEPLOYMENT MEDICAL CARE

- Know where to seek health care when deployed
- May or may not be through same channels as your home station
- Maintain your health and seek care whenever an illness or injury occurs
  - Illness may be an initial sign of a terrorist attack



# MEDICAL THREAT

- Personal Health
- Endemic Diseases
- Occupational Threat
- Environmental Threat
- Non-Battle Injuries/Operational Safety
- Operational Stress



# PERSONAL PROTECTIVE MEASURES

- Wash hands frequently
- Do not rub eyes or inside of nose with bare finger(s); use clean tissue if necessary
- Bathe daily (use unscented products)
- Wear shower shoes to prevent athlete's foot
- Dry thoroughly after showering
- Sleep head-to-toe if billeted in common areas
- Wear clean, dry uniforms; change socks daily
- Seek prompt medical care if problem exists



# SEXUAL ACTIVITY

- Abstinence is the only 100% effective method for preventing sexually transmitted diseases
- Choose an effective method of birth control
  - Always use condoms during sex – regardless of other measures you choose. Using latex condoms during each sexual encounter provides improved (not 100%) protection against STD's and pregnancy.





# ORAL HEALTH

- Deploy with:
  - Toothbrush
  - Dental Floss
  - Fluoride Toothpaste
- Brush twice-daily
- Floss daily
- Seek medical attention at the onset of any dental problems



# NUTRITION

- Drink fluids continuously
- Maintain weight; do not avoid food or attempt weight loss during a deployment
- Work in cold weather can increase energy need 5%



# PERSONAL PROTECTIVE MEASURES ON-SITE

- Do not eat, smoke or chew at the recovery site, excavation site, landfill, or other contaminated areas.
  - If you do, wash your hands, face, and neck prior to eating, drinking, smoking or chewing
  - Drink only from approved sources
- Seek medical attention whenever you experience unusual symptoms

# CARBON MONOXIDE

- Carbon monoxide (CO) is a colorless, odorless, and tasteless gas produced by engines, stoves, and gas/oil heaters.
- CO replaces oxygen in the body, causing headache, sleepiness, coma, and death.

## COUNTERMEASURES

- Keep sleeping area windows slightly open for ventilation and air movement.
- DO NOT sleep in vehicles with the engine running or use engine exhaust for heat.
- DO NOT park vehicles near air intakes to tents, trailers, or environmental control units.



Do not use unapproved commercial off-the-shelf heaters



# COLD INJURY PREVENTION

- Hypothermia, Frostbite, Chilblains

## COUNTERMEASURES

- When possible, remain inside warming tents/buildings and drink warm, uncaffeinated liquids for relief from the cold.
- If working outside or on guard duty, insulate yourself from the ground and wind. Rotate duty as frequently as mission allows.
- Properly wear the Extended Cold Weather Clothing System



**YOU SHOULD RECEIVE ANNUAL UNIT TRAINING ON PREVENTION OF COLD INJURY**

# COLDER

- C:** Keep clothing Clean.
- O:** Avoid Overheating.
- L:** Wear clothing Loose and in layers.
- D:** Keep clothing as Dry as possible.
- E:** Examine clothing for holes, tears, and broken fasteners.
- R:** Repair or replace damaged clothing.



**Notify your first-line supervisor if you have had a previous cold injury. Use the buddy system.**

# HEAT INJURY PREVENTION

- Heat Cramps, Exhaustion, or Stroke

## COUNTERMEASURES

- Replace water
- Maintain acclimatization
- Protect yourself from exposure to sunlight and wind
- Maintain good physical condition
- Establish work/rest schedules
- Wear proper clothing
- Participate in training



**You should receive annual unit training on prevention of heat injury. Heat injuries are preventable!**

# HEAT

**H:** Heat category – WBGT Index

**E:** Exertion level

**A:** Acclimatization

**T:** Tables – Water/Work/Rest

**REMEMBER**

**Water requirements are not reduced by any form of training or acclimatization.**



**Units which have soldiers who do not drink because they do not have opportunities to urinate have a leadership problem.**



# VECTOR-BORNE DISEASES



**Ticks**



**Mosquitoes**

- **Lyme Disease**
- **Rocky Mountain Spotted Fever**
- **Human Ehrlichiosis**
- **West Nile Encephalitis**
- **St. Louis Encephalitis**
- **Eastern and Western Encephalitis**

**Your Medical Authority will provide guidance on the specific threat and countermeasures for your deployment location**

# PERSONAL PROTECTIVE MEASURES



**Permethrin  
On  
Uniform**



**DEET On  
Exposed  
Skin**



**Properly  
Worn  
Uniform**

**MAXIMUM  
~~PRO~~TECTION**



**DOD Insect Repellent System**

**YOU NEED TO KNOW...** Dry cleaning removes permethrin from the uniform

# INSECT REPELLENTS FOR SKIN AND CLOTHING

## DEET lotion



NSN 6840-01-284-  
2002



- Apply a thin coat to **EXPOSED** skin
- One application lasts up to 12

## Permethrin

- Individual Dynamic Absorption Kit (IDA)
- Treatment lasts for life of the uniform



NSN 6840-01-345-  
0237



NSN 6840-01-278-  
1336

- Aerosol spray can
- Treatment lasts through 5-6 washes



# HAZARDOUS ANIMALS

- Rabies: bats, raccoons, skunks, foxes, wild dogs and cats
- Hantavirus: infected rodent feces and urine
- Ticks, fleas, mites: carried by rodents
- Rodents: contaminate food, damage equipment



## COUNTERMEASURES

- Do not feed, handle, or keep wild or stray animals as pets or mascots
- Do not tolerate the presence of rodents
- Maintain a high state of sanitation
- Avoid inhaling dust when cleaning unoccupied areas
- Seek medical attention for animal bites or scratches





# VENOMOUS ANIMALS

- Rattlesnakes, cottonmouths, copperheads, and coral snakes
- Bees, wasps, hornets, ants, and some caterpillars
- Spiders, centipedes, and scorpions



## COUNTERMEASURES

- Avoid bees, hornets, wasps, ants, and spiders
- Do not attempt to handle or capture any snakes
- Shake out clothes, shoes, and bedding before use
- Wear foot protection at all times (no barefoot)
- Bring proper medication if allergic to bites/stings



# POISONOUS PLANTS

- CONUS-wide distribution
- Vine or shrub-like
- Plant resins cause contact dermatitis

## COUNTERMEASURES

- Avoid touching unfamiliar plants
- Use clothing as protective barrier
- Rinse skin promptly after exposure
- Wash clothing after contact

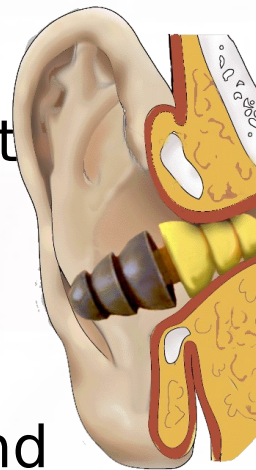


# HEARING CONSERVATION

- Loud noise causes permanent hearing loss.

## COUNTERMEASURES

- Have your hearing protection with you at all times and use it
- Be sure your ear plugs, noise muffs or helmets fit properly and are in good condition.
- Avoid noise or limit time around noise to only critical tasks.



**Combat  
Arms  
Earplug**



**Authorized  
wear**

**IAW AR 670-1**

If you have to raise your voice to be understood, it is too noisy.

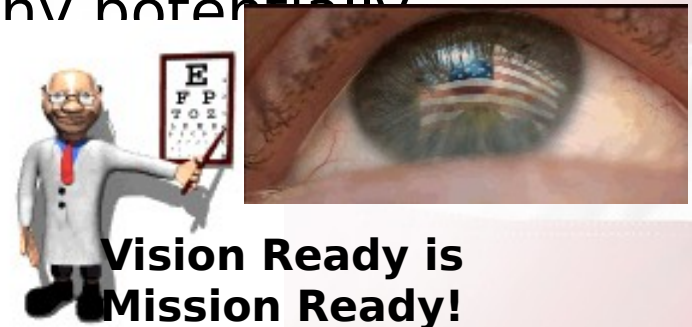
Put on hearing protection.



# VISION CONSERVATION

- **Preventive Measures and Eye Protection**

- Contact lens use is prohibited for use in environments where exposure to smoke, toxic chemical vapors, sand, or dust occurs.
- If required, maintain 2 pair of glasses and 1 protective mask insert.
- Use eye protection when in any potentially eye hazardous environment.
  - Safety goggles or spectacles with side shields\*
  - Chemical splash goggles\*



**Vision Ready is  
Mission Ready!**

\*(ANSI Z87.1 approved)



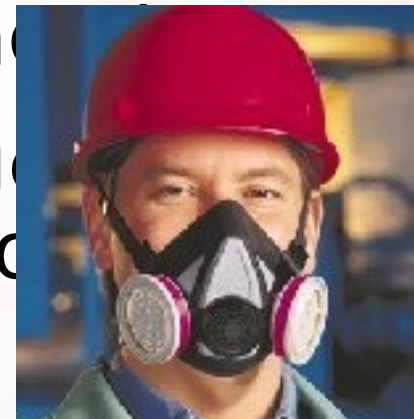
# RESPIRATORY PROTECTION MILITARY MASK

- Your military mask is classified as a negative pressure full facepiece air-purifying respirator. It is specifically designed for battlefield use against military chemical and biological warfare materials.
- Should not be used for disaster situations/ operations unless directed to do so.



# RESPIRATOR USE PRACTICES

- Respirators are selected for particular environments, exposures and contaminants
- Respirators have limitations
- Air purifying respirators do NOT provide oxygen or breathing
- Never use “Vicks” or orange oil to hide an unwanted odor



# RESPIRATORY PROTECTION MISSION SPECIFIC

- Half or full facepiece air purifying respirator with P-100 Class filter (99.97% filter efficient), organic vapor and acid gas combination cartridge:
  - Direct Rescue/Recovery
  - Separating Debris/Landfill
- Half facepiece or filtering facepiece air purifying respirator with N ,R, or P-95 Class filter:
  - Traffic and Security Operations



**Contact your supporting Preventive Medicine Service,  
Medical Authority, or USACHPPM for additional  
guidance**

# OTHER PERSONAL PROTECTIVE EQUIPMENT

- Skin Protection:
  - Disposable coveralls with shoe covers and leather-palmed or heavy work gloves
- Head and Foot Protection:
  - Hardhat or Kevlar with the chin strap secured
  - Steel-toed boots preferred
- Reflective safety vest





# ENVIRONMENTAL CONCERNS

- Explosive Atmospheres
- Extreme Heat from Burning Materials
- Unstable Buildings
- Unstable Ground Conditions
- Sewage Contact



# ENVIRONMENTAL AIR POLLUTION

- Location of Air Pollution Sources
  - Burning or Damaged Buildings
  - Open Burning/Waste Disposal
  - Vehicle/Generator Exhaust
- Contaminants
  - Dust, Silica, Asbestos, Lead
  - Organic Vapors and Organic Gases
- Industrial Facilities



# TOXIC INDUSTRIAL CHEMICALS/MATERIALS

- CONUS threat exists from accidental or ***intentional*** release of TICs/TIMs.
- Most prevalent TICs/TIMs are:
  - Chlorine (mainly for water treatment)
  - Ammonia (in agriculture).
- Protective measures are chemical specific
  - Your Medical Authority will provide appropriate countermeasures.
- *There is no one size fits all protective measures – this includes MOPP gear.*

# BLOODBORNE PATHOGENS

- Bloodborne pathogens (BBPs) pose a risk to unprotected rescuers or remains recovery personnel when exposed to human blood and other potentially infectious materials:
  - Body fluids
  - Tissues
  - Blood-saturated, dripping, or blood-caked clothing or equipment.
- BBPs Include:
  - Hepatitis B, C, D virus
  - Human immunodeficiency virus (HIV)
  - 23 other infectious diseases



# UNIVERSAL PRECAUTIONS

- "**Universal Precautions**" is the name used to describe a prevention strategy in which all blood and potentially infectious materials are treated as if they are, in fact, infectious regardless of the perceived status of the source individual.
- In other words, **whether or not you think the blood/body fluid is infected with bloodborne pathogens, you treat it as if it is.**



# PREVENTION OF BLOODBORNE INFECTION

- Personal Protective Equipment (PPE)
  - Gloves (Fluid-Proof)
  - Eyes and Face Protection
  - Body Protection
  - Head and Foot Protection



**If you find yourself in a situation where you have to come in contact with blood or other body fluids and you don't have any standard personal protective equipment handy, you can improvise. Use a towel, plastic bag, or some other barrier to help avoid direct contact.**

# **BLOODBORNE INFECTION PPE**

- Rules to follow:
  - Always wear personal protective equipment in exposure situations
  - Remove PPE that is torn or punctured, or has lost its ability to function as a barrier to bloodborne pathogens
  - Replace PPE that is torn or punctured
  - Remove PPE before leaving the work area

**To protect yourself, it is essential to have a barrier between you and the potentially infectious material**

# BLOODBORNE INFECTION HYGIENE PRACTICES

- Hands or other exposed skin should be thoroughly washed as soon as possible following an exposure incident
- Hands should also be washed immediately (or as soon as feasible) after removal of gloves or other PPE
- If you are working in an area without an approved water source, you may use an antiseptic cleanser in conjunction with clean cloth/paper towels or antiseptic towelettes





# INJURY PREVENTION

- Slips, Trips, and Falls
- Sharp/Hot Objects
- Falling Objects
- Vehicle Safety
- Electrical Safety
- Back Safety



# SPORTS INJURIES

- Unit physical training progr
- Sporting activities
  - Avoid “tackle” sports
  - Wear safety equipment (eye and mouth protection during recreational activit



**Sports activities can result in injuries - some minor, some serious, and still others resulting in lifelong medical problems.**

# STRESS

- Operational stressors
- Different types and intensities
- Recognize the symptoms of depression
- Seek or encourage help
- Take steps to reduce operational stress


**Stress can be intensified for personnel who are exposed to or observe human suffering and/or death**

# MAINTAIN SPIRITUAL HEALTH

- Maintain personal prayer/meditation
- Obtain and read wholesome religious/spiritual literature
- Attend religious/spiritual group discussions/studies
- Process anger, fear, anxiety & guilt through personal & group spiritual/religious activities
- Keep in touch with spiritual advisors/chaplains



# POST DEPLOYMENT

- Post-Deployment Medical Health Assessment (DD FORM 2796)
- Post-Deployment screening, testing, and follow-up
- Continue to seek counseling from Chaplain or medical personnel
- Homecoming Stress 

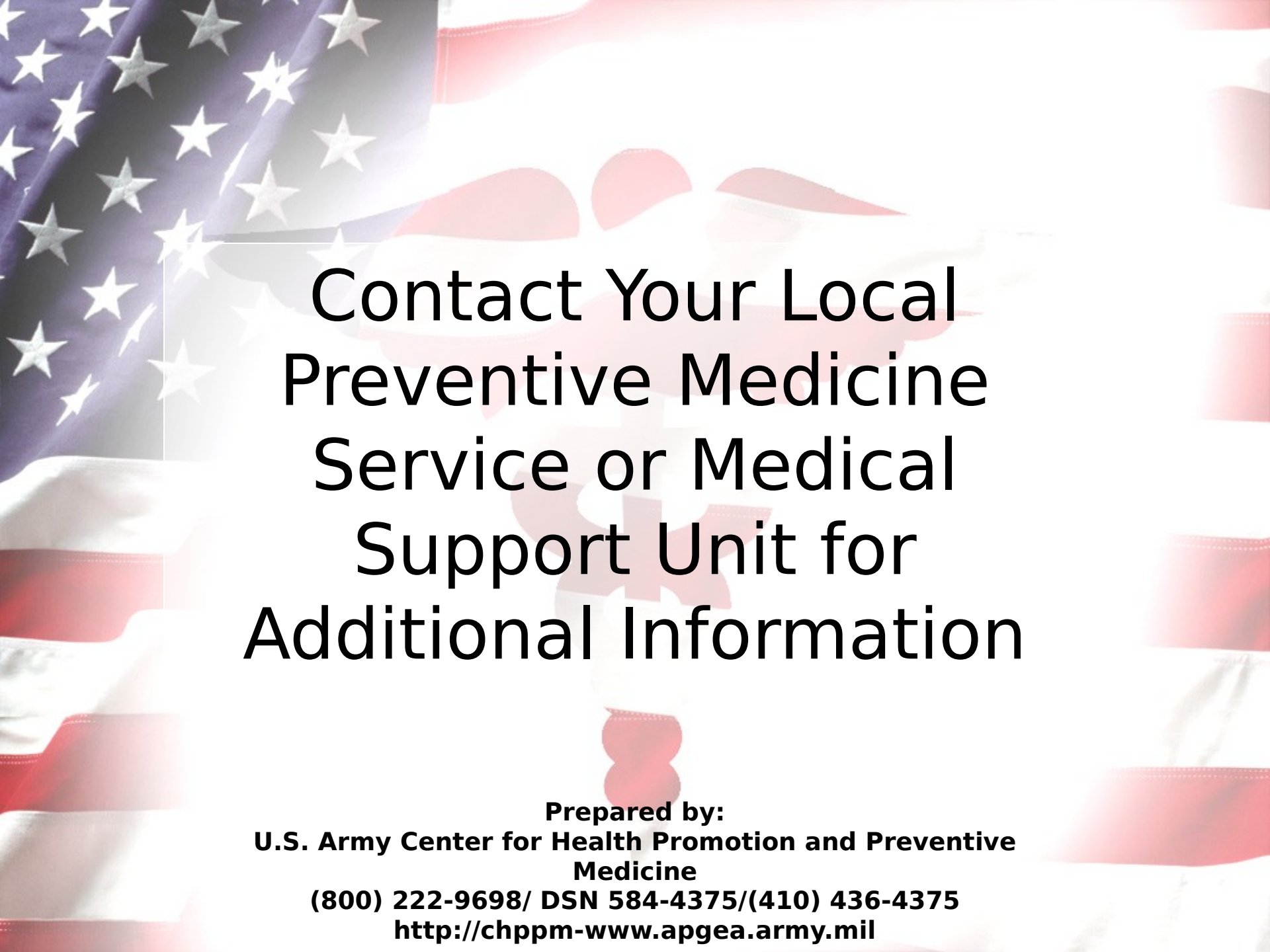
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# SUMMARY

- Review of *Guide to Staying Healthy*
- Preparation for Deployment
- Deployment
- Medical Threat
- Post Deployment

# CONCLUSION

- It is critical to all military missions that personnel (including combat, support, and sustaining base military and civilian forces) are aware of health threats and the countermeasures discussed in this briefing and the *Guide to Staying Healthy*. This information can be applied during all phases of military operations, including training, pre-deployment, deployment, and post-deployment.



# Contact Your Local Preventive Medicine Service or Medical Support Unit for Additional Information

**Prepared by:  
U.S. Army Center for Health Promotion and Preventive  
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